



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,094	12/04/2001	Kurt R. Dahlberg	053727-5001-US	8029

9629 7590 07/21/2003

MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

NGUYEN, SON T

ART UNIT PAPER NUMBER

3643

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/000,094

Applicant(s)

DAHLBERG ET AL.

Examiner

Son T. Nguyen

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. Claims 37-46 have been cancelled by Applicants.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-7,36** are rejected under 35 U.S.C. 102(b) as being anticipated by Romaine et al. (US 4,803,800).

For claim 1, Romaine et al. disclose an enriched mushroom compost supplement comprising the addition of a polysaccharide to a mushroom compost supplement (col. 9, lines 31-45, col. 10, lines 59-68).

For claim 2, since Romaine et al. employ polysaccharide in the supplement, the added polysaccharide will provides a significantly higher yield when compared to a supplement lacking the polysaccharide.

For claim 3, Romaine et al.'s polysaccharide is selected from cellulose, straw, starch, hemicellulose, etc. (col. 5, Table A, col. 9, lines 41-42).

For claim 4, the polysaccharide of Romaine et al. contains cellulose or cellulose-containing ingredients (col. 5, Table A, col. 9, line 41).

For claim 5, since Romaine's compost supplement contains the same ingredient as that of the present invention, the supplement of Romaine should dampens or

suppresses temperature surges during spawn run just as well as that of the present invention.

For claim 6, Romaine et al. do not mentioned anything about an additional antimicrobial, therefore, Romaine's supplement does not require the antimicrobial.

For claim 7, since Romaine's compost supplement contains the same ingredient as that of the present invention, the supplement of Romaine should suppresses or reduces the growth of pest and pathogen microorganisms.

For claim 36, Romaine's cellulose have been treated (col. 5, Table A, the cellulose contains polymers such as ethyl succinylated, methyl, hydroxyethyl, etc. which means that the cellulose was treated with these polymers).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 8-35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Romaine et al. (as above).

For claim 8, Romaine et al. teach a plurality of supplements which one can use (col. 9, lines 31-45), but they are silent about the supplement consisting solely of polysaccharides. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use solely polysaccharides in the supplement of Romaine et al. depending on the required nutrient/supplement desired for the particular

type of mushrooms. Note, Romaine et al. never stated that the supplement consisted of multiple substances mixed together. Romaine et al. merely gave a list of nutrient supplement (col. 9, lines 31-45) which one could use either solely or mixed together depending on the require nutrient desired.

For claims 9-17, Romaine et al. are silent about various quantities or proportions of polysaccharides to use. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ various quantities or proportions of polysaccharides of Romaine et al., since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable ranges until the desired effect is achieved involves only routine skill in the art. In re Aller, 105 USPQ 233.

For claims 18-27, Romaine et al. are silent about certain formulas and their quantities or proportions to be used in the supplement. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ various formulas in the supplement of Romaine et al. depending on the required nutrient/supplement desired for the particular type of mushrooms. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ various quantities or proportions in the supplement of Romaine et al., since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable ranges until the desired effect is achieved involves only routine skill in the art. In re Aller, 105 USPQ 233.

For claim 28, Romaine et al. disclose a method of increasing mushroom yield comprising the steps of adding an enriched supplement such as polysaccharides to a mushroom compost (see explanation for claim 1); allowing the development of the mushrooms (col. 4, line 22). However, Romaine et al. do not specifically teach harvesting the mature mushrooms. It is well known in the agriculture industry, esp. in mushrooms, that once a mushroom is fully developed, it is harvested. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the step of harvesting the mature mushrooms in the method of Romaine et al. because it is notoriously well known in the art that when one grows mushrooms into fully mature mushrooms, one has to harvest the mushrooms for either sales or to provide space for other mushroom experimentation.

For claim 29, see explanation for claim 2.

For claim 30, Romaine et al.'s mushroom is a Basidiomycete (col. 28, Table XII).

For claim 31, Romaine et al.'s mushroom is a fleshy Basidiomycete (col. 28, Table XII).

For claim 32, et al.'s mushroom is selected from the group as claimed (col. 28, Table XII).

For claims 33-35, Romaine et al. disclose a method of supplementing a mushroom compost comprising the steps of adding an enriched supplement such as polysaccharides to a mushroom compost (see explanation for claim 1). However, Romaine et al. are silent about various quantities or proportions of polysaccharides to use. It would have been obvious to one having ordinary skill in the art at the time the

Art Unit: 3643

invention was made to employ various quantities or proportions of polysaccharides of Romaine et al., since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable ranges until the desired effect is achieved involves only routine skill in the art. In re Aller, 105 USPQ 233.

Response to Arguments

6. Applicant's arguments filed 5/16/03 have been fully considered but they are not persuasive.

Applicants argued that Romaine et al. do not teach enriched mushroom compost supplement because it is directed to mushroom spawn or casing spawn. These materials are not the same as the enriched mushroom compost supplement of the instant application and a person having ordinary skill in the art would not equate these materials with each other. This is because mushroom spawn and casing spawn materials have a different purpose and are used for different reasons than mushroom compost supplements in the cultivation of mushrooms. The gel matrix of Romaine et al. contains the same ingredients or materials as that of Applicants invention, therefore, it is capable of being used or performed the same function for the same purpose and reasons intended by Applicants. Considering the statement made by Applicants regarding that the gel matrix of Romaine has different purpose and are used for different reasons, does it really because what other purpose, as alleged by Applicants, is Romaine intending beside to "enrich" the mushroom with nutrients for growth enhance? In addition, what other different reason, as alleged by Applicants, does Romaine

Art Unit: 3643

intending beside to grow mushroom? Clearly from the disclosure of Romaine et al., the purpose and reason of their invention is to enrich the mushroom with nutrients and other materials so that the mushroom with growth, this is very much the same intention as the present invention so it is unclear to the Examiner what Applicants mean by Romaine et al. having different purpose and different reasons for their gel matrix?

The supplement is what is being added to this "spawn", which is merely a nutrient substrate for mushroom to grow in. The mushroom compost supplement is ingredients or materials making up the gel matrix, and since Romaine et al. teach multiple materials can be added in the matrix, any one of the added material(s) is an enrichment to the compost supplement, in this case, the added material can be polysaccharides (col. 9, line 35). Although Romaine et al.'s matrix has other enrichment materials, the present claim language does not indicate "consisting only polysaccharide or polysaccharide composition"; therefore, the material being claimed in the present invention is taught in Romaine et al.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son T. Nguyen whose telephone number is (703) 305-0765. The examiner can normally be reached on Monday - Friday from 9:00 a.m. to 5:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon, can be reached at (703) 308-2574. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



Son T. Nguyen
Primary Examiner, GAU 3643
July 18, 2003